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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/472,534

12/27/1999

ANTHONY MAZZURCO

036560.6630

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05/12/2004

ALCATEL USA  
INTELLECTUAL PROPERTY DEPARTMENT  
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EXAMINER

JAGANNATHAN, MELANIE

ART UNIT

PAPER NUMBER

2666

14

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/472,534

Applicant(s)

MAZZURCO ET AL.

Examiner

Melanie Jagannathan

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims **16,20-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tounai in view of Ishiwatari U.S. 6,201,788.

Regarding claims **16,20-22**, the claimed receiving an inbound working channel and an inbound protection channel at an input interface is disclosed by switch (Figure 1, element 4) receiving working line (element 1A) and protection line (element 2A). The claimed determining a signal quality of the inbound working and protection channels and selecting one of inbound working and protection channels into switch in response to signal quality is disclosed by control means (element 5) generating automatic protection scheme and having of function of detecting various alarms for when a failure occurs. See column 3, lines 42-59. The claimed providing the

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selected one of inbound working and protection channels to switching matrix is disclosed by selected channel being provided from equipment #2 to switch (element 4) in equipment #1 in order to maintain predetermined connections between equipments and incur no loss of data and prevent suspension of service. See column 1, lines 21-30 and column 3, lines 34-36.

Tounai discloses all the limitations of the claims except for a switching matrix receiving one of inbound working and protection channels, switching matrix operable to output selected one of inbound working and protection channel, matrix connections are not disrupted due to selection at the input interface between working and protection channels. Ishiwatari discloses transmission device (Figure 9A) receiving data from working optical fiber cables and transmitting data to other transmission devices and maintaining connections despite fault by use of loop-back formation as part of automatic protection scheme. See column 4, lines 6-37. At the time the invention was made, it would have been obvious to have switching matrix operable to receive and output one of inbound working and protection channels in the system of Tounai. One would be motivated to do this in order to transmit data despite failure of working channel.

Regarding claim **22**, the claimed network protection being a 1:1 linear APS protection scheme is disclosed by use of the bi-directional of the 1+1 method. See column 7, lines 8-9.

Regarding claim **24**, the claimed bi-directional line switched ring protection implementing ring switch is disclosed by use of the bi-directional of the 1+1 APS method with switch for selecting working or protection line and SONET rings (Figures 16 and 33).

3. Claims **17-19,25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tounai and Ishiwatari in view of Dempsey U.S. 6,526,021.

Tounai and Ishiwatari disclose all the limitations of the claims except for claimed receiving of plurality of inbound working channels and protection channel and providing a protection switch request. Dempsey discloses a 1:N protection configuration (Figure 1) where there are N working channels and one protection channel. The claimed selecting of plurality of inbound working channels and inbound protection channel and providing traffic is disclosed in if working channel fails, traffic is switched to protection channel. See column 5, lines 45-60. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a plurality of working channels and a protection channel for a 1:N protection scheme. One of ordinary skill in the art would be motivated to do this for protection against failure involving more than one data channel.

#### ***Response to Arguments***

4. Applicant's arguments filed 3/1/2004 have been fully considered but are not persuasive.

Applicant argues reference Ishiwatari does not disclose providing the selected one of inbound working and protection channels to a switching matrix, the switching matrix outputs the selected one of inbound working and protection channels over a predetermined connection, the switching matrix maintaining connections regardless of which one inbound working and protection channels is selected. Examiner contends Ishiwatari discloses transmission device (Figure 9A) receiving data from working optical fiber cables and transmitting data to other transmission devices and maintaining connections despite fault by use of loop-back formation as part of automatic protection scheme. Loop-back formation is made such that the working

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channels in fiber cable (Figure 9B, element 11<sub>1</sub>) via signals are received from transmission device (Figure 9B, element 10C) are coupled to the protection channels (element 11<sub>2</sub>) via which signals sent to transmission device 10C and then making a loop-back where protection channels are coupled to the working channels extending from transmission 10D. See column 4, lines 6-37. Therefore, for the above outlined reasons, Examiner maintains rejection is proper.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melanie Jagannathan  
Patent Examiner  
AU 2666

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FRANK DUONG